AMENDMENT

In the Claims

The following listing of claims replaces all prior versions, and listings, in the application:

1. (Original) A method of forming articles from fibrous webs, the method comprising the steps of:

providing a wet slurry of sodium silicate;

adding a dielectric reducing agent to the sodium silicate; coating the wet slurry onto a fibrous substrate;

drying the coated substrate to reduce the total moisture content of the combined substrate and coating to form an activatable web having an activatable adhesive in a non-activated state;

forming the activatable web into the shape of an article; and

heating moisture retained within the fibrous substrate by exposing the substrate to microwave energy to indirectly activate the adhesive by solubilizing the adhesive.

2. (Original) The method of claim 1 wherein the drying step comprises the step of reducing the total moisture content of the combined substrate and coating to between 1 and 15 percent.

3. (Original) The method of claim 2 wherein the drying step comprises the step of reducing the total moisture content to between 6 and 8 percent.

4. (Original) The method of claim 1 wherein the step of adding a dielectric reducing agent comprises adding sugar to the sodium silicate in a weight ratio of between 5 parts sugar to 95 parts silicate and 35 parts sugar to 65 parts silicate.

5. (Original) The method of claim 1 wherein the step of forming the activatable web into the shape of an article comprises the step of winding the coated substrate around a mandrel.

6. (Original) The method of claim 5 wherein the step of winding the activatable web around a mandrel comprises overlapping layers of the substrate to form a tube.

7. (Original) The method of claim 1 wherein the step of forming the activatable web into the shape of an article comprises the step of winding the coated substrate around a mandrel comprising a substantially microwave invisible material.

8. (Original) The method of claim 1 wherein the forming step comprises the steps of: placing the activatable web on an unwind stand to become an outer substrate; providing an inner substrate on a second unwind stand; pressing the inner substrate and outer substrate together into a hybrid web, wherein the activatable adhesive is positioned between the inner substrate and the outer substrate; and winding the hybrid web onto a cylindrical mandrel.

9. (Original) The method of claim 1 further comprising the step of applying a protective coating on the activatable adhesive after the drying step.

10. (Original) A method for creating a hollow cylindrical core, the method comprising the steps of:

a) providing an outer substrate, the outer substrate being drawn from a first roll;

b) providing an inner substrate, the inner substrate being drawn from a second roll;

c) applying a non-activated adhesive to at least one surface of one of the substrates;

d) pressing the inner substrate and outer substrate together into a hybrid web, wherein the non-activated adhesive is positioned between the inner material and the outer material;

e) winding the hybrid web onto a cylindrical mandrel; and

f) indirectly activating the adhesive by applying microwave energy to heat moisture within at least one of the substrates, wherein the adhesive joins the inner substrate and outer substrate together.

11. (Original) The method of claim 10 further comprising the step of applying pressure to the hybrid web after the adhesive activation step.

12. (Original) The method of claim 10 wherein the adhesive comprises a sodium silicate and a dielectric reducing agent.

13. (Original) The method of claim 12 wherein the dielectric reducing agent is a sugar.

14. (Original) The method of claim 13 wherein the weight ratio of sugar to silicate is between 5 parts sugar to 95 parts silicate and 35 parts sugar to 65 parts silicate.

15. (Original) The method of claim 10 wherein the adhesive comprises a thermoplastic.

16. (Withdrawn) A hollow cylindrical core comprising: a) an outer substrate; b) an inner substrate; c) an activated adhesive between the substrate layers, the activated adhesive joining the outer substrate and the inner substrate together to form an adhesively joined hybrid web; d) wherein the adhesively joined hybrid web is wound upon itself to form the cylindrical core.

17. (Withdrawn) The core of claim 16 wherein the adhesive comprises a silicate and a dielectric reducing agent.

18. (Withdrawn) An activatable web for forming articles, the web comprising: a fibrous substrate having a moisture content; a coating of a non-activated adhesive that can be indirectly activated by microwave energy absorbed by the moisture in the substrate, the adhesive coating being disposed on the substrate; and a protective coating of a material that is compatible with the non-activated adhesive, the protective coating being disposed on the adhesive coating.

19. (Withdrawn) The activatable web of claim 18 wherein the non-activated adhesive comprises sodium silicate.

20. (Withdrawn) The activatable web of claim 19 wherein the non-activated adhesive further comprises a dielectric reducing agent.

21. (Withdrawn) The activatable web of claim 18 wherein the compatible material is selected from the group consisting of sugar, sorbitol, glycerin, ethylene glycol and acrylics.

22. (Withdrawn) The activatable web of claim 18 wherein the compatible material is sucrose.

23. (New) The method of claim 10, wherein the non-activated adhesive is applied in the form of a wet slurry.

24. (New) A method of forming articles from a fibrous substrate comprising:

providing a fibrous substrate;

providing a wet slurry containing sodium silicate and a dielectric reducing agent;

applying the wet slurry to at least a portion of at least one side of the fibrous substrate to form a coated substrate having latent water contained therein;

drying the coated substrate;

exposing the coated substrate to microwave energy, thereby heating the latent water in the coated substrate and at least partially dissolving the sodium silicate to activate adhesive properties of the sodium silicate; and

forming the coated substrate into the shape of an article.

25. (New) The method according to claim 24, wherein the dielectric reducing agent is a sugar.

26. (New) The method according to claim 24, wherein during the drying step, the moisture content of the coated substrate is reduced to a level of between 1 to 15 percent.

27. (New) The method of claim 24, wherein the step of forming the coated substrate into the shape of an article comprises the step of winding the coated substrate around a mandrel.

28. (New) The method of claim 27, wherein the step of winding the coated substrate around a mandrel comprises overlapping layers of the substrate to form a tube.

29. (New) The method of Claim 24, wherein the forming step occurs prior to the activating step.